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QWEST COMMUNICATIONS INTERNATIONAL INC  
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EXAMINER

SHANG, ANNAN Q

ART UNIT PAPER NUMBER

2614

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/514,033

Applicant(s)

BRODIGAN ET AL.

Examiner

Annan Q Shang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-10, are rejected under 35 U.S.C. 102(e) as being anticipated by **Hendricks et al (6,201,536)**.

As to claim 1, note the **Hendricks et al** reference figures 1, 7 and 8, disclose a cable television system headend capable of monitoring and managing headend components and set top terminals (STT) and further disclose a method for personalized interactive programming over a data path, the data path extending between the service provider (Operation Center (OC) 202) being connected to a data network (telephone, ATM, etc., network) and having an address (channel number(s)), the method comprising:

the claimed “establishing a communication path between a broadband digital terminal and the set top box...” is met by Headend (HE) 208 (figs. 1, 7, 8 and col. 6, line 56-col. 7, line 19), note that Operation Center (OC) 202 packs programs and interactive Menus and transmits, via satellite 206 or terrestrial link 218 and fiber/coax link, to

Set-top terminals (STTs) 220 via HE 208, and upon receipt of a request for IPPV/VOD (col. 18, lines 1-29), HE 208 "broadband digital terminal" which acts as a network manager 214 (col. 8, line 65-col. 9, line 7) by receiving information from STTs 220 and passing it on to OC 202, establishes a virtual channel (col. 34, line 61-col. 35, line 5) path "communication path" via bi-directional fiber/coax link between HE 208 and STTs 220 and terrestrial link 218 between HE 208 and OC 202, that enables rapidly generating of interactive Custom Menus (col. 15, lines 9-43 and col. 29, line 62-col. 30, line 30) specific to each STT 220 for the IPPV/VOD program to be received in less than 2 milliseconds (col. 18, line 11), note that HE 208 is connected to a telephone network 244 or 246, ATM network 226, etc. (figs 7 and 8) "data network" and OC 202 "service provider" broadcasts video through HE 208 and STT 220.

the claimed "sending a private data packet in addition to the broadcast video from the service provider, over the network and through the broadband digital terminal..." is met by OC 202 (col. 8, lines 8-34), note that OC 202 packs programs to different categories and rapidly generates Custom Menus "private data packet" specific to each STT 220 and transmits Custom Menus in addition to video program data to each STT 220 via satellite 206 or terrestrial link 218 "the network" via HE 208 (col. 8, lines 4-54), note that the Custom Menus includes interactive Menus data "application interface information" (col. 15, lines 9-43 and line 51-col. 16, line 10) and channel number(s) "address" to various service provider(s) (col. 8, lines 30-43), which are packed at OC 202 and transmitted to each STT 220 via HE 208; note that OC 202 and HE 208 maintains address of each STT 220 (col. 28, lines 32-45 and col. 29, lines 26-

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40) and HE 208 further receives and processes requests from each specific STT 220 to met specific demands of each STTs 220, based on the requests received; and

HE 208 establishes an impulse pay-per-view communication path (col. 24, lines 12-33) between STT 220 and OC 202 based upon the address of STT 220 to allow interactive programming using rapidly created Custom Menus and the control program received from OC 202 via HE 208 to personalize the broadcast programming (col. 15, lines 9-43, line 51-col. 16, line 10 and col. 18, lines 1-43).

As to claim 2, Hendricks further discloses a method for providing personalized interactive programming over a data where sending the Custom Menus data packet is performed by inserting the Custom Menus data packet by inserting the Custom Menus data packet between frames of a video transmission (col. 15, lines 19-43 and col. 26, lines 6-23).

As to claim 3, Hendricks further discloses where the IPPV/VOD programs "video transmission" is prerecorded programming that is transmitted on demand (col. 18, lines 17-29).

As to claim 4, Hendricks further discloses where the video transmission is real-time programming (col. 17, lines 48-59 and col. 18, lines 1-16).

As to claim 5, note the **Hendricks et al** reference figures 1, 7 and 8, disclose a cable television system headend capable of monitoring and managing headend components and set top terminals (STT) and further disclose an interactive video/data system (200) for interacting with destination address of a network, the system comprising:

the claimed “a broadcast source at the destination address for transmitting a private data packet over a private virtual channel on the network...” is met by OC 202 (figs. 1, 7, 8, col. 6, line 56-col. 7, line 19 and col. 8, lines 8-34) note that Operation Center (OC) 202 packs programs and interactive Menus and transmits, via satellite 206 or terrestrial link 218 and fiber/coax link, to Set-top terminals (STTs) 220 via HE 208, and upon receipt of a request for IPPV/VOD (col. 18, lines 1-29), HE 208 “broadband digital terminal” which acts as a network manager 214 (col. 8, line 65-col. 9, line 7) by receiving information from STTs 220 and passing it on to OC 202, establishes a virtual channel on the network (col. 34, line 61-col. 35, line 5) path “communication path” via bi-directional fiber/coax link between HE 208 and STTs 220 and terrestrial link 218 between HE 208 and OC 202, that enables rapidly generating of interactive Custom Menus “private data packet” (col. 15, lines 9-43 and col. 29, line 62-col. 30, line 30) specific to each STT 220 for the IPPV/VOD program in less than 2 milliseconds (col. 18, line 11), note that the Custom Menus includes interactive Menus data “application interface information” (col. 15, lines 9-43 and line 51-col. 16, line 10) and channel number(s) “destination address” to various service provider(s) (col. 8, lines 30-43), which are packed at OC 202 and transmitted to each STT 220 via HE 208; note that OC 202 and HE 208 maintains address of each STT 220 (col. 28, lines 32-45 and col. 29, lines 26-40) and HE 208 further receives and processes requests from each specific STT 220 to met specific demands of each STTs 220, based on the requests received;

the claimed “a broadband digital terminal receiving the packet over the private virtual channel from the broadcast source” is met by Headend (HE) 208 (col. 9, lines 3-7

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and col. 34, line 60-col. 35, line 5) note that HE 208 acts as a network controller and receives requested programs from OC 202 via terrestrial link 218 and relays to STT 220 via a virtual channel;

The claimed "a set top box..." is met by Set top terminal (STT) 220 (col. 15, lines 9-43 and col. 29, line 62-col. 30, line 30) note that OC 202 and HE 208 maintains address of each STT 220 and HE 208 and each specific STT 220, and STT 220 requests for programs using the control program and the interactive Custom Menus received from OC 202 or HE 208 and STT 220 cooperates with HE 208 and OC 202 to establishes an impulse pay-per-view virtual channel (col. 24, lines 12-33) from terrestrial link 218, node 288 and fiber/coax link, extending from STT 220 and HE 208 over the virtual channel to broadcast source OC 202 at a channel number destination, the data path allowing interactive Custom Menus and the control program to be communicated in real-time between STT 220 and OC 202 (col. 17, lines 48-59 and col. 18, lines 1-16).

As to claim 6, Hendricks further discloses where the interactive video/data system comprises a television Screen for receiving video transmission from the STT 220 (col. 7, line 58-col. 8, line 3).

As to claim 7, Hendricks further discloses where the interactive video/data system comprises an optical network interface between HE 208 and STT 220 (col. 7, lines 8-14).

As to claim 8, the claimed "network interface device..." is met by Node 288 (col. 23, lines 35-49 and col. 24, lines 22-33), which is between HE 208 and STT 220.

Claim 9 is met as previously discussed with respect to claim 2.

As to claim 10, Hendricks further discloses where the OC 202 is also a local server HE 208 (col. 9, lines 3-7 and col. 10, lines 19-27).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11, is rejected under 35 U.S.C. 103(a) as being unpatentable over **Hendricks et al (6,201,536)** in view of **Mimura et al (6,557,031)**.

As to claim 11, **Hendricks** further teaches receiving and packing various service provider video programs over various networks, such as, ATM network, Local networks, etc., and sending upstream request via telephone network or bi-directional fiber/coax communication link, but fails to explicitly teach where the broadcasting source is an Internet service provider.

However, note the **Mimura et al** reference teaches a network system that connects plurality of CATV networks 62 by Internet 50 and where STB 57 receives broadcast video from Video Server 60 via Internet 50 (figs. 9 and col. 8, lines 6-23).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Mimura into the system of Hendricks to connect the cable network to the Internet network and provide services to a wide area network.



***Response to Arguments***

5. Applicant's arguments, see Paper No. 8, filed 05/17/04, with respect to the rejection(s) of claim(s) 1-11 under Laubach et al (6,081,533) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hendricks et al (6,201,536), discussed above.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hendricks et al (6,675,386) disclose apparatus for video access and control over computer network, including image correction.

Scott et al (6,338,094) disclose method, device and system for playing a video file in response to selecting a web page link.

Nam et al (6,138,163) disclose mediate server and real time delivery method between different networks.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q Shang** whose telephone number is **703-305-2156**. The examiner can normally be reached on **700am-500pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W Miller** can be reached on **703-305-4795**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC)** at **866-217-9197 (toll-free)**.



**Annan Q. Shang.**



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